Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

IN THE MATTER OF	)	
	)	
High-Cost Universal Service Support	)	WC Docket No. 05-337
	)	
Federal-State Joint Board on Universal Service	)	CC Docket No. 96-45
	)	
Lifeline and Link Up	)	WC Docket No. 03-109
	)	
Universal Service Contribution Methodology	)	WC Docket No. 06-122
	)	
Numbering Resource Optimization	)	CC Docket No. 99-200
	)	
Implementation of the Local Competition Provisions in the Telecommunications Act of 1996	)	CC Docket No. 96-98
	)	
Developing a Unified Intercarrier Compensation Regime	)	CC Docket No. 01-92
	)	
Intercarrier Compensation for ISP-Bound Traffic	)	CC Docket No. 99-68
	)	
IP-Enabled Services	)	WC Docket No. 04-36

REPLY COMMENTS OF INTERNET2

Internet2 is a National Research and Education Network ("NREN"). NRENs are noncommercial, not-for-profit, entities that, among other things, operate networks for the research and education community, which community includes colleges and universities, research laboratories, research hospitals, government laboratories, museums, K12 schools and

libraries. The scientific community relies heavily on NRENs to operate networks that support cutting edge science in all of the following fields: physics, medicine, computer science, bioinformatics, biodiversity and ecological research, geoscience, astronomy and space exploration.

Currently, the U.S. is a leader in each of these areas of science, and is also competitive in each such area. But the U.S. can retain these roles only if its scientists can continue to heavily depend upon massive and unique data flows from devices, sensors and instruments all around the world, which data is brought to their laboratories by the networks that NRENs, such as Internet2, operate. Whereas many foreign governments, including the European Union, subsidize their NRENs' operations, U.S. scientists and universities generally fund the U.S. NREN activities using limited project-specific federal and private research dollars to maintain the United States' edge in these areas without direct government support of the NREN. Accordingly, the fewer telecommunications-related fees that NRENs incur, the more likely it is that they will be able to continue to have the funds necessary to operate the networks required to ensure that the U.S. retains its leadership role in each of the important scientific fields referenced above. In that regard, Internet2 requests that the Commission provide NRENs with an exemption from universal service charges when the Commission considers how to implement a contribution methodology for business services. Internet2 recognizes that the Commission cannot grant wholesale exemptions to thousands of companies for universal services charges, but Internet2 strongly believes that given the special role that NRENs have in this country with regard to cutting edge science, an exemption for NRENs is warranted.

A sample list of the matters/projects that the U.S. retains a leadership role in because of NRENs' operation of the necessary networks, include the following:

- LHC (The Large Hadron Collider), which is located in Geneva, Switzerland at CERN, is the world's largest and highest energy particle accelerator. More than 2,500 U.S. physicists will depend upon data from the LHC to conduct their research over the next two decades. The LHC is designed to help resolve many fundamental questions about the origins of the universe and the nature of matter, which research will help uncover new energy sources, develop new materials for numerous industries, and help us better understand the global environment of our planet.

- LIGO (Laser Interferometer Gravitational-Wave Observatory) is a global experiment on finding gravitational waves, which will increase our understanding of the fundamental properties of matter, thereby also helping uncover new energy sources, develop new materials in a variety of industries, and better understand the global environment of our planet.

- ITER (The International Thermonuclear Experimental Reactor) in Southern France is at the cutting edge of trying to harness nuclear fusion, and will provide similar benefits to those of LHC and LIGO. The LHC and LIGO are attempting to verify predicted properties of matter, and ITER is even much closer to bringing fusion into practical production. Loss of data from ITER, therefore, could have an immediate and devastating impact on American fusion energy research.

- GENIUS (Grid Enabled Neurosurgical Imaging Using Simulation) is a project to use an array of high performance computers connected by advance networks to simulate blood flow into and from the heart to better understand cardiovascular disease, so as to reduce cardiovascular disease and deaths.

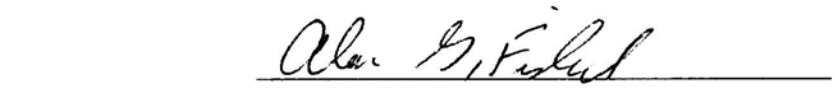
- BRIITE (Biomedical Research Institutions Information Technology Exchange) is a project involving very important cancer research.

- GLORIAD (Global Ring Network for Advanced Applications Development) is built on a fiber-optic ring of networks around the northern hemisphere connecting numerous countries, including the U.S., Russia and China, to promote increased engagement and cooperation between countries on a wide variety of issues including (i) strengthening current programs in nuclear weapons disposal, nuclear materials protection, and combating terrorist threats; (ii) supporting technologies to provide virtually limitless supplies of energy; (iii) new telemedicine applications; and (iv) improved weather forecasting and earthquake prediction.

- The e-VLBI (Electronic Very Long Baseline Interferometry) is an array of radio telescopes spread around the globe, which conduct unique high resolution, radio astronomical observations of cosmic radio sources. The e-VLBI provides astronomers with their best view of the most energetic phenomena in the universe, including expanding supernovae, pulsars, flare stars, and the environment surrounding nearby and distant galaxies. These telescopes provide astronomers with the ability to, in effect, use the entire planet as a telescope with remarkable resolution that enables astronomers to observe and predict important trends that affect residents of all nations.

Respectfully submitted,

INTERNET2



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Its Attorney